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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,798

08/17/2006

Takayuki Suzuki

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GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

05/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,798	Applicant(s) SUZUKI, TAKAYUKI	
	Examiner Steven D. Maki	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Suzuki et al

3) **Claims 11-12 and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al (US 7,404,423).**

Suzuki et al discloses a pneumatic tire with a tread comprising blocks and grooves. See Figure 1. In view of the substantial similarity between the tread pattern of Figure 1 of US 7,404,423 and Figure 1 of this application, it is reasonable to conclude that the claimed ratio of block facing length c / groove width a is inherently satisfied.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Japan 403

4) Claims 11-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 403 (JP 03-132403) in view of Takada (US 6,000,451).

Japan 403 discloses a pneumatic radial tire for heavy load having a tread comprising blocks and grooves. See abstract and Figure 1. In a central region of the tread, three block lines are defined by a "substantially net shaped tread pattern" of inclined grooves, which are illustrated as being inclined at an angle of about 50 degrees with respect to the tire circumferential direction. See Figure 1. Protrusions are disposed at the bottom of the grooves to provide stone bite resisting properties. See abstract, Figure 1, Figure 3 and Figure 4c. The tread also comprises a row of blocks in each shoulder region of the tread. See Figure 1. The shape and arrangement of the blocks of Figure 1 of Japan 403 is generally similar to the shape and arrangement of blocks in Figure 1 of this application. Japan 403 does not literally recite block facing length c being 50-130% groove width b and/or block facing length c being 40-85% groove depth a.

As to claims 11-26, it would have been obvious to one of ordinary skill in the art to provide the blocks and grooves of the tread of Japan 403's heavy load tire such that block facing length "c" (as defined in claims 11 and 20) is 50-130% (or 100-130%) groove width "b" and/or block facing length "c" (as defined in claims 11 and 20) is

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40-85% (or 60-80%) groove depth "a" and, with respect to claims 18 and 25, groove width "b" is 60-80% groove depth "a" in view of (1) Japan 403's disclosure to use a tread pattern having blocks and grooves shaped and arranged as shown in figure 1 for a heavy load tire and (2) Takada's teaching to provide the grooves of a tread pattern of a heavy duty tire such that the groove width GW is 6-15% of the tread width TW and the groove depth GH is 8-18% of the tread width wherein Takada's tread pattern is similar to that of Japan 403. With respect to groove depth GH in Takada, it is noted that Takada teaches that height H1 of protrusions at the bottom of the grooves is 10-25% groove depth GH and that examples 2 and 3 use a height H1 of 4 mm. Distances in millimeters can therefore be determined for groove depth GH, groove width GW and tread width TW using the relationships of $H1 = 4 \text{ mm}$, $H1 = 10\text{-}25\% \text{ GH}$, $GH = 8\text{-}18\% \text{ TW}$ and $GW = 6\text{-}15\% \text{ TW}$.

Remarks

5) Applicant's arguments filed 2-4-10 have been fully considered but they are not persuasive.

In view of the statement at the last three lines of the response filed 2-4-10, US 7,404,423 is not available as 102(e) type prior art under 35 USC 103(c). However, US 7,404,423 remains available as prior art under 35 USC 102(e).

As to the 102 rejection, applicant argues that US 7,404,423 is not available as prior art because the inventors for the claimed invention and the US 7,404,423 are the same (Takayuki Suzuki). Applicant is incorrect because the inventive entity for this

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application is Takayuki Suzuki whereas the inventive entity for US 7,404,423 is Takayuki Suzuki and Toshiro Oyama.

As to the 103 rejection of claim 20, applicant argues that Japan 403 and Takeda do not disclose the claimed ratio of c/a being 0.4 to 0.85. Applicant notes that neither reference discloses taking the measurement of the block facing length c . This argument is not persuasive. FIRST: Claim 20 fails to require the step of taking the measurement of block facing length c . Claim 20 is directed to an article (tire) instead of a method. See MPEP 2113. SECOND: The shape of the blocks in Figure 1 of Japan 403 necessarily defines a "distance c " and Takada, directed to the same type of tire as Japan 403 (heavy load / duty tire with tread having blocks), teaches a range for "groove depth a " ($GH = 8-18\% \text{ TW}$) that can and should be used for Japan 403's tire. The claimed ratio c/a (claim 20) is sufficiently broad to read on a ratio resulting from using a groove depth within the range disclosed by Takada for the heavy load tire of Japan 403. This is especially true since claim 20 fails to specify to what the lines for determining length c are perpendicular.

As to the 103 rejection of claim 11, applicant fails to present any argument explaining why claim 11 is non-obvious. Thus, the 103 rejection of claim 11 (directed to the ratio c/b) stands.

6) No claim is allowed.

7) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven D. Maki/
Primary Examiner, Art Unit 1791

Steven D. Maki
May 24, 2010